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ABSTRACT

Many researchers have examined the influence of perceptions on health related behaviors and efficacy perceptions have been shown to have powerful correlations with health behaviors. Most studies have focused on adults, few have looked at adolescents' efficacy perceptions about their health, and none have addressed the confidence teenagers have in their daily mental and physical health routines. The School Health Efficacy Questionnaire (SHEQ) was developed to measure adolescent perceptions of mental and physical health self-efficacy. A revised version of the SHEQ was administered to 449 high school students in grades 10-12. Twelve school nurses were asked to rate the items on the SHEQ, indicating how competent they believed the average high school student to be in each behavior. Data analysis showed the SHEQ to have sturdy reliability and validity properties and to be a useful tool in evaluation studies addressing adolescent health issues. The results indicated that psychosocial health issues troubled the adolescent slightly more than did physical health issues. Findings suggest that teenagers are fairly consistent about their self-beliefs. Mental health problems were concentrated on anxiety-producing events and physical health difficulties centered around daily routines. Managing sources of anxiety and managing daily, routine behaviors were perceived by the students to be relatively difficult. Gender differences appeared throughout the analyses. (NB)

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Physical and Mental Health Self-Efficacy in High School Students

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INTRODUCTION

The health concerns of today's adolescents are changing rapidly and may not be very well understood. Current news releases and national reports are peppered with examples of adolescent health problems:

--A recent survey of 6,000 students in 28 schools in Connecticut showed more than 800 respondents to be at risk for committing suicide (Seline, 1988).

--AIDS is currently the seventh leading cause of death for youths age 15 to 24 (Novello, 1988).

--Obesity in adolescents has increased by 45 percent in the last two decades (Gortmaker, 1988).

In a larger context, diseases of dietary excess or imbalance rank among the leading cause of illness or death in the U.S., and dietary choices are significant contributers to five of the ten leading causes of death in our society (Pierre, 1989). Dietary misbehaviors are learned early in life and are reinforced strongly by adolescent peers. In fact, because school personnel believe that their primary mission is to change academic behavior, schooling implicitly supports peers as a main influence on eating and other health behaviors. And although health behaviors for youth are increasingly more complicated than learning to shower or brush one's teeth daily, they receive sparse attention in secondary schools.

Learning in classrooms occurs as the result of both intentional and accidental instruction. Imitation learning and modeling--frequently unintentional--provide a powerful force for socialization in and out of schools. While teachers focus on academic skills and instruction, student peers are the most immediate models for socialization behaviors. Unfortunately, adolescent peers as models may be particularly unenlightening in the development of suitable mental and physical health behaviors. As suggested by statistics mentioned above, some adolescents pose especially dramatic and undesirable models of health behaviors.

Even when they are addressed in schools, student health perceptions and concerns have typically been left to the responsibility of ancillary staff: the school nurse, school psychologist and guidance counselor. Despite increasing attention to youth fitness, teen pregnancies and suicides, smoking, drug and alcohol abuse, little school time is devoted to

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direct instruction regarding adolescent health matters. Even less time is offered to asking students what they believe are problematic health issues. In the absence of data one may wonder if physical health is actually perceived as a problem by adolescents. Most of them enjoy an efficient physical machine and so might show little concern for illnesses or disability. From a developmental viewpoint, Elkind (1967) suggests that adolescent egocentrism can make it difficult for the teenager to comprehend the link between current behavior and later consequences.

As a society, we are becoming more conscientious about our health behaviors. No doubt adolescent health issues will receive more attention in the school curriculum as youth health problems are documented in press releases and popular media. Educational efforts to address adolescent health concerns could wander from an effective focus if we do not know what teenagers feel most inefficacious about. The research described here surveyed a representative group of adolescents in the 10th, 11th and 12th grades to describe what personal health behaviors they felt most and least confident about performing. In general, this study describes the construction of the School Health Efficacy Questionnaire (SHEQ). The specific objectives of the research were:

--The development of a dependable tool to measure adolescent perceptions of (mental and physical) health self-efficacy;
--Estimating the reliability and validity of the SHEQ;
--Determining if sex differences exist in the health self-efficacy of male and female adolescents;
--Determining if high school grade (10th, 11th, 12th) is related to health self-efficacy;
--Determining if health self-efficacy is related to achievement behavior.

RELATED LITERATURE

Social learning theory suggests that we learn through both direct and vicarious reinforcement. Bandura (1977) proposed the construct of self-efficacy as a powerful mediator influencing which learned behaviors we actually attempt and continue. Self-efficacy is one's perception of capability for a particular task. Although Bandura originally used self-efficacy to explain why various treatments change fearful or phobic behavior, his recent review shows that the construct has shown explanatory usefulness in more routine behaviors (Bandura, 1986). Numerous studies have shown it to be a salient predictor of motivation, behavior and achievement (*cf.* Schunk, 1988).

Many researchers have studied the influence of perceptions on health related behaviors. Efficacy perceptions are shown regularly to have powerful correlations with health behaviors that are approached or avoided, learned or abandoned (O'Leary, 1985; Rosenstock, *et al.*, 1988). Most studies have focused on adults, often those in treatment or rehabilitative programs. Few studies exist describing adolescents' efficacy

perceptions about their health. None have addressed the confidence teenagers have in their daily mental and physical health routines.

Unlike typical measures of self-beliefs (*e.g.*, self-esteem, self-concept), self-efficacy instruments have shown remarkably sturdy measurement properties. Reliability estimates are commonly in the .85--.95 range (Froman & Owen, 1987). And a variety of studies have documented impressive evidence for construct validity (Strecher *et al.*, 1986; Froman & Owen, in press).

Aside from its measurement properties, self-efficacy is particularly useful to researchers and educators because it is manipulable. Bandura (1986) has described four sources of efficacy expectations, in decending potency: actual success at the task, vicarious learning, verbal persuasion, and interpretation of physiological cues. Changing any one of the sources can alter efficacy perceptions. Each of these sources is alterable and, to some extent, under the direction of teachers in classrooms. Thus, knowledge of students' health self-efficacy may contribute to understanding if the classroom milieu enhances or inhibits development of healthful perceptions. Such understanding is also central to the development of curricula that address students' health concerns.

METHODS AND DATA

Instruments. In consultation with several experts in physical and mental health, an initial pool of items was developed for the SHEQ. The item pool was next reviewed by 13 members of a doctoral level practicum in self-efficacy research. After rewording of confusing items and elimination of redundant ones, a response format was attached to the surviving items. For each item, respondents are asked to indicate the degree of confidence they have in their ability to perform a simple behavior. Confidence is noted on a 5-point, Likert-type scale with the polar responses labeled "very little" and "quite a lot." The three middlemost responses are unlabeled.

The initial version of only 21 *physical* health self-efficacy items was pilot tested with 70 10th and 12th grade students. Alpha internal consistency for those items was estimated to be .88. Exploratory regression analyses on the short scale gave modest but encouraging results; subsequently, items were revised, deleted, or added. Items were arranged in two subscales, physical health and mental health. The final version of SHEQ contains 43 questions (see Appendix). The physical health subscale contains 21 items (example item: "Knowing when I am getting sick"), and the mental health subscale contains 22 items (example item: "Avoiding worry about trivial things"). Demographic information about sex, age, grade level, GPA, and estimated number of days absent from school are included at the top of the SHEQ.

Data Source. The revised SHEQ was administered to a representative cross section of students in a large, middle class

suburban high school in New England (grades 10-12, n=449). Data were collected in social studies classes, a required class for all students. Table 1 shows descriptive biodata for this group of students.

Insert Table 1 here

Analyses. The statistical methods concentrated on validity and reliability evidence. Factorial validity was explored with principal factor analyses, for the total sample and separately by sex. The factoring by sex was based on conjecture that male and female health concerns, especially for adolescents, would be different. This was anticipated given continued reports of sex differences found in school age populations on a variety of psychosocial measures (Grant & Sleeter, 1986; Farmer, 1987; Chipman, 1988). Alpha internal consistency estimates were calculated for the factors that emerged in each of the PFAs. MANOVAs and regression analyses were used to study construct and convergent validity. The MANOVAs were conducted to link variation in health self-efficacy to sex, grade level and GPA. Regressions continued the effort to explain variation in health efficacy beliefs.

Finally, 12 school nurses were asked to rate the items on SHEQ indicating how competent they believe the *average* high school student is in each behavior. Mean ratings for each item were calculated and compared to adolescents' self ratings for estimates of concurrent validity.

RESULTS

Preliminary Analyses. Univariate and multivariate outliers were located and deleted. A case was considered a univariate outlier if, on any variable of interest, it lay more than 4 standard deviations from the mean of the total group; 5 cases were thus deleted. Multivariate outliers were located using Mahalanobis D^2 values calculated from all variables simultaneously. A case was considered a multivariate outlier if the D^2 value was significant beyond $p = .001$; three additional cases were thus deleted.

Means and standard deviations for each item are given in Table 2. Ratings from both the adolescents and the nurses are presented. Higher mean values correspond with a stronger sense of efficacy as a value of 1 was coded for "very little" confidence and 5 for "quite a lot" of confidence on the student ratings. Similarly, 1 indicates a low estimate of student competence in the nurses' ratings, and 5 indicates high competence.

Insert Table 2 here

A Hotelling T^2 for matched data was used to compare overall student ratings in mental versus physical health self-efficacy. The significant T^2 value of 14.72 ($p<.0001$) was calculated. Examination of the subscale means shows that overall, students report slightly more confidence for their physical health behaviors than for their mental health behaviors. However, because of the large sample size, the significance test has excessive power. The subscale means (3.86 and 3.78, for physical health and mental health, respectively) differ by only about one eighth of a standard deviation, probably not of great practical importance.

Factor Analyses. Data were subjected to three principal factor analyses (PFAs) for each of the subscales: one conducted on the total sample, one on males and one on females. For the total sample, the PFA on the mental health subscale, using a direct quartimin oblique solution, gave two factors (correlated .57) that accounted for 78% of the systematic covariation among responses. A very similar outcome was found for the female analysis: The main factor was "interpersonal concerns," and the second, "anxiety." For the males, however, only a single factor emerged, with each item in the scale showing loadings greater than .30. The two female factors gave alpha internal consistency estimates of .89 and .84, respectively. The single male factor produced an alpha of .90. Table 3 summarizes the PFA results for the mental health subscale.

Insert Table 3 here

In factoring the physical health subscale, the overall analysis again resembled the female analysis: two factors (correlated .40) emerged: "treatment and preventive activities" and "substance abuse." The factors accounted for 73% of the systematic variation, compared to 78% for the male two-factor solution. The male factors, however, were notably different: "illness behaviors" and "routine preventive behaviors." Table 4 gives summary data from these factor analyses.

Insert Table 4 here

MANOVAs. Considering the emergence of different factor structures for males and females, MANOVAs were run separately by sex. The general structure was a 2 X 3 (high and low GPA X grade level) analysis on whatever factor scores were pertinent. GPA was split into two levels by partitioning students reporting grades of C or below versus those reporting grades higher than C.

In the separate MANOVAs for mental health self-efficacy, both male and female analyses gave significant main effects for

GPA (male F = 26.64, df = 1/188, p<.0001; female F = 4.25, df = 2/242, p = .015). In both MANOVAs, the effect for grade level was also significant (male F = 5.38, df = 2/188, p = .0054; female F = 3.13, df = 4/484, p = .015). The interactions were nonsignificant. In both of these analyses, the trends are conspicuous. Students with high GPAs enjoy much stronger appraisals of their mental health coping skills, and mental health self-efficacy improves as students move through grades 10 to 12. Upper class students and students earning higher grades show more confidence in their ability to perform behaviors associated with mental health.

In the separate MANOVAs for physical health self-efficacy, both male and female analyses showed significant grade by GPA interactions (male F = 5.32, df = 4/368, p = .0004; female F = 2,70, df = 4/474, p = .030). Although the dependent variables for the analyses consisted of different factors, plots of the interactions show clear consistency. For grade 10, there are no differences for high and low GPA students, but for grades 11 and 12, high GPA students show strong advantage in physical health self-efficacy. Tables 5 and 6 show the cell means for both pairs of MANOVAs.

Insert Tables 5 and 6 here

Regression Analyses. School absences, grade level, age, college plans (yes or no), GPA, and self-reported overall health (1 to 5) were used as predictors of subscale SHEQ scores. To simplify the analyses, and to allow direct comparisons of males and females, the factor structure was ignored and only the total subscale scores were used. The regressions for the males and females were calculated separately and the slopes tested for diferences.

In the prediction of physical health self-efficacy, there was a significant difference between the male and female equations (F = 2.96, df = 7/391, p = .005). The male model produced an R of .581, explaining 34% of the variation in physical health self-efficacy; the female model developed an R of .510 (R^2=.26). There are two notable differences in the male and female models: absenteeism was insignificant for males but important for females, and GPA was significant for males but unimportant for females. Table 7 shows a more detailed summary of the regression models for physical health self-efficacy.

Insert Table 7 here

For the prediction of mental health self-efficacy, there were again sex differences in the regression equations (F = 3.01,

df = 7/391, *p* = .004). The male model produced an *R* of .590, explaining 35% of the variation in physical health self-efficacy; the female model developed an *R* of .531 (R^2=.28). As in the previous comparison, GPA was an important predictor of male, but not female, mental health self-efficacy. And overall health rating was significant for females but unimportant for the male model. Table 8 shows the separate regressions of mental health self-efficacy.

Insert Table 8 here

In the final analysis, nurses' ratings of student competence in each of the health behaviors with the student self-ratings of confidence. A Spearman rank correlation between the two sets of mental health data was .47 ($p < .05$); for the two sets of physical health data, .55 ($p < .01$). An inspection of the items rated most difficult by both groups (see Table 1) showed 80% agreement. On the 5 easiest items, however, there was only 60% agreement. Overall, then, the nurses and students showed modest congruence, although the student means are considerably and dependably higher than those of the nurses.

DISCUSSION

This study of adolescents shows the SHEQ to have sturdy reliability and validity properties. As such it is useful in research and evaluation studies addressing teen health. It is a rapid, easily administered scale that does not threaten students. Anecdotal observations suggest that students enjoy answering questions about themselves. If assured of anonymity (or, using a coding number that only the student knows), this sort of self-report measure is markedly different from, and more motivating than, the usual paper and pencil measures that teenagers are familiar with.

Simple descriptive data and Hotelling T test results indicate that psychosocial health issues trouble adolescents slightly more than physical issues do. Visual comparison of item means suggests that stress, anxiety, time management and interpersonal issues outshadow colds and muscle pulls as problems for adolescents. Although the statistical test comparing overall subscale means was clearly significant, that sort of aggregate test obscures large individual differences among students and among items.

Perhaps more practical information can be gleaned from some of the individual item responses. The five physical health items for which students showed the weakest confidence were: getting enough sleep, eating three good meals a day, scheduling a sensible work load, eating a balanced diet, and avoiding getting drunk. Average rating on these five items was 2.48. The five most difficult behaviors on the mental health subscale were: asking someone for a date, avoiding situations that create

anxiety, avoiding worry about trivial things, keeping academic anxiety under control and keeping overall anxiety under control. The average on these five items was 3.32. The grouping of items suggests that teens are fairly consistent about their self-beliefs. The physical health difficulties center around daily routines (getting drunk notwithstanding). The mental health problems are concentrated on anxiety-producing events. Managing sources of anxiety and managing daily, routine behaviors are perceived as relatively difficult. These problems probably need more systematic and direct attention in high schools. They are concerns that may be covered in a variety of settings and classes. The groupings of behaviors contribute to what health practitioners commonly refer to lifestyle behaviors and choices. Fortunately, these beliefs, as measured by the SHEQ, are self-efficacy *perceptions* and as such are manipulable. These student responses provide direction for efforts by educators should they wish to foster a more healthy student "body."

We are puzzled by the divergence of 10th graders' perceptions on the physical health and mental health self-efficacy measures. In examining plotted data, it appears that physical health expectations are stable (excepting 10th grade), while mental health beliefs show steady improvement. Perhaps juniors and seniors have adjusted and stabilized their cognitions about earlier, rapid physical growth, but cognitions about affective matters are not yet settled.

The differences between nurse ratings and student self-ratings can be explained with two hypotheses. First, adolescent egocentrism may augment beliefs about skills and behavior, especially in areas in which a high schooler may have little experience. But to the extent that self-efficacy expectations are strong predictors of behavior, even inflated beliefs should not be discredited. Second, school nurses may have a pessimistic perspective on routine behavioral skill, because the focus of their work is the student with health difficulty.

Finally, sex differences appeared throughout the analyses, and in some ways fit the findings of other researchers studying self-beliefs of adolescents (Byrne & Shavelson, 1987). The factor analyses were exploratory, and the sex differences seen here need to be studied further with confirmatory structural modeling (*i.e.*, using LISREL or EQS). The regression analyses showed the strongest sex differences. Males' health self-efficacy is better explained (7 to 8 %) than is females'. And GPA is relevant to males' self-efficacy but not to females'. It is interesting to note that females' self-rating of overall health seems more salient to their self-efficacy beliefs. Perhaps various aspects of health form a more unified network in the belief systems of females. For males, by comparison, efficacy expectations are plainly more related to school achievement behaviors. It is too soon to suggest that these sex differences have implications for differential curricular interventions.

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Table 1

Summary Biodata for Males and Females

		Male (n=194)	Female (n=251)	Total (n=445)	
Absences	$\bar{X}$	6.12	9.02	7.80	
	S	6.29	7.60	7.18	
Age	$\bar{X}$	16.16	16.61	16.41	
	S	0.93	0.90	0.91	
College	$\bar{X}$	1.78	1.87	1.83	(1 = NO; 2 = YES)
	S	0.41	0.34	0.37	
GPA	$\bar{X}$	3.78	4.25	4.04	(1 = D's; 7 = A's)
	S	1.25	1.21	1.25	
Mental S/E	$\bar{X}$	3.73	3.81	3.78	(1 = VERY LITTLE CONFIDENCE;
	S	0.71	0.59	0.65	5 = QUITE A LOT OF CONFIDENCE)
Physical S/E	$\bar{X}$	3.81	3.90	3.86	(1 = VERY LITTLE CONFIDENCE;
	S	0.75	0.59	0.66	5 = QUITE A LOT OF CONFIDENCE)
Self-Report Health	$\bar{X}$	4.14	3.96	4.04	(1 = POOR; 5 = EXCELLENT)
	S	0.91	0.82	0.86	

Table 2

Students' and Nurses' Mean and Standard Deviations on SHEQ

	STUDENTS'		NURSES'	
	MEAN	SD	MEAN	SD
1. Eating a balanced diet.	3.52	1.11	2.50	0.90
2. Eating three good meals a day.	3.44	1.27	2.25	0.62
3. Avoiding accidents.	3.96	1.05	3.00	0.85
4. Treating a cold.	3.78	1.09	2.92	0.79
5. Avoiding smoking cigarettes.	4.00	1.55	3.50	0.90
6. Getting enough sleep.	3.27	1.26	2.50	1.00
7. Taking medications properly.	4.04	1.15	2.29	0.79
8. Treating a fever.	3.86	1.13	2.75	0.87
9. Avoiding cavities in my teeth.	3.90	1.10	3.43	0.65
10. Treating minor cuts.	3.94	1.09	3.75	0.75
11. Treating muscle pulls or strains.	3.85	1.09	3.00	1.13
12. Maintaining a reasonable weight.	3.97	1.09	2.92	1.15
13. Exercising regularly.	3.73	1.22	2.92	1.00
14. Avoiding colds or other infections.	3.68	1.08	2.50	0.90
15. Knowing when I am getting sick.	4.07	0.99	3.00	0.60
16. Maintaining body cleanliness.	4.76	0.62	3.83	0.60
17. Knowing who to ask about a health concern.	4.17	0.94	2.25	0.87
18. Scheduling my work load sensibly.	3.60	1.10	2.08	0.90
19. Avoiding getting drunk.	3.48	1.49	2.75	1.14
20. Dressing appropriately for the weather.	4.11	1.00	2.75	0.90
21. Avoiding illegal drugs.	4.21	1.31	4.00	1.13
22. Avoiding worry about trivial things.	3.34	1.20	2.25	0.75
23. Avoiding situations that create anxiety.	3.26	1.14	2.50	0.67
24. Keeping academic anxiety under control.	3.37	1.14	2.50	0.80
25. Keeping my overall anxiety under control.	3.37	1.12	2.50	0.67
26. Meeting females my own age.	4.10	1.07	3.64	0.67
27. Meeting males my own age.	3.97	1.18	3.64	0.67
28. Maintaining friendships.	4.41	0.86	3.75	0.75
29. Being kind to other people.	4.43	0.90	3.25	0.97
30. Being happy.	4.10	1.01	2.92	0.79
31. Getting along with my parents.	3.84	1.14	2.50	0.67
32. Getting along with adults.	4.15	0.95	2.83	0.83
33. Asking someone for a date.	3.27	1.32	2.64	0.89
34. Telling the truth.	3.86	1.02	3.08	0.51
35. Getting a part-time job that I enjoy.	3.83	1.19	3.00	1.04
36. Keeping my grades up while working part-time	3.63	1.12	3.25	0.62
37. Driving safely.	4.04	1.13	2.92	0.90
38. Wearing seatbelts.	3.62	1.52	3.00	1.08
39. Flying in a jet.	3.41	1.55	2.92	1.24
40. Making an appointment with a physician.	3.63	1.25	2.08	0.79
41. Getting regular checkups with my dentist.	3.72	1.24	2.67	1.15
42. Living a long life.	4.34	0.99	3.42	0.90
43. Maintaining a positive attitude toward school	3.61	1.16	3.25	0.75

Table 3

Loadings for Mental Health Factors

	Total (n=393)		Female (n=229)		Male (n=162)
Item	Factor1	Factor2	Factor1	Factor2	Factor 1
29	74		61		66
32	70		62		71
28	63		56		63
43	59		52		70
27	56		56		55
40	55		53		56
34	54		41		62
41	53		49		42
42	53		44		64
30	50				67
36	50				68
37	50				58
31	49		41		69
38	48		49		45
35	44				54
26	40		64		
23		84		79	68
25		83		90	74
24		79		83	60
22		67		63	66
33					42
alpha=	90	86	89	84	90

Note: Decimals and loadings less than .40 are omitted.

Table 4

Loadings for Physical Health Factors

	Total (n=420)		Female (n=236)		Male (n=181)	
Item	Factor1	Factor2	Factor1	Factor2	Factor1	Factor2
1	74		63			83
11	67		63			40
2	63		54			70
14	61		53		56	
4	60		63		80	
13	60		50			73
8	58		60		80	
7	57		55		57	
10	55		57		63	
18	51		41			55
12	51		50			46
15	51		51		61	
9	50		44			40
6	47		40			
3	43				61	
17	40		41		44	
19		74		85	63	
21		72		75	63	
5		45		49		
20					52	
alpha=	91	84	90	86	90	87

Note: Decimals and loadings less than .40 are omitted.

Table 5
Cell Means by Sex, Grade, and GPA for
Mental Health Self-Efficacy Factor Scores

Grade			GPA High	GPA Low
10	Male	F1	3.70 (n=29)	3.20 (n=40)
	Female	F1	3.83 (n=46)	3.80 (n=24)
		F2	3.31	3.17
11	Male	F1	4.05 (n=60)	3.79 (n=20)
	Female	F1	3.24 (n=70)	3.81 (n=24)
		F2	3.27	2.80
12	Male	F1	4.05 (n=35)	3.75 (n=10)
	Female	F1	4.25 (n=78)	3.85 (n=07)
		F2	3.27	2.86

Note: F1 and F2 refer to the subscales developed from the principal factor analysis. For subscale items, see Table 3 and Appendix.

Table 6

Cell Means by Sex, Grade, and GPA for
Physical Health Self-Efficacy Factor Scores

Grade			GPA High		GPA Low	
10	Male	F1	3.82	(n=29)	3.21	(n=40)
		F2	3.59		3.43	
	Female	F1	3.64	(n=45)	3.89	(n=21)
		F2	3.88		3.96	
11	Male	F1	4.12	(n=60)	3.49	(n=18)
		F2	4.06		3.26	
	Female	F1	3.99	(n=70)	3.50	(n=24)
		F2	3.14		3.53	
12	Male	F1	3.99	(n=35)	4.12	(n=10)
		F2	4.14		3.44	
	Female	F1	3.96	(n=78)	3.55	(n=07)
		F2	4.21		4.04	

Note: F1 and F2 refer to the subscales developed from the principal factor analysis. For subscale items, see Table 4 and Appendix.

Table 7

Summary of Male and Female Regression Models for Mental Health Self-Efficacy

	MALE					FEMALE				
Variable	*b*	S_b	*B*	*t*	*p*	*b*	S_b	*B*	*t*	*p*
Intercept	2.92					1.28				
Absences	.01	.01	.06	0.96	.34	.01	.01	.11	0.19	.07
Grade	.03	.01	.03	0.32	.75	-.06	.07	-.08	-0.82	.41
Age	.15	.07	.20	2.03	.04	.02	.06	.03	0.33	.74
College*	.43	.13	.25	3.46	.00	.38	.11	.21	0.34	.00
Health	.06	.05	.07	1.07	.28	.24	.04	.35	0.59	.00
GPA	.20	.04	.35	4.78	.00	.06	.03	.12	1.81	.07

*College plans are scored no=1, yes=2.

Table 8

Summary of Male and Female Regression Models for Physical Health Self-Efficacy

	MALE					FEMALE				
Variable	*b*	S_b	*B*	*t*	*p*	*b*	S_b	*B*	*t*	*p*
Intercept	2.47					1.15				
Absences	.01	.01	.06	0.09	.35	.01	.00	.16	2.59	.01
Grade	.11	.11	.11	1.00	.32	.10	.07	.13	1.37	.17
Age	.19	.08	.23	2.36	.02	.06	.06	.09	0.33	.74
College*	.44	.13	.24	3.25	.00	.22	.12	.12	1.91	.06
Health	.15	.06	.18	2.66	.01	.26	.04	.37	6.09	.00
GPA	.19	.05	.31	4.24	.00	.04	.03	.07	1.11	.27

*College plans are scored no=1, yes=2.